

FIGURE 1

SP22 1 MASKRALVILAKGAEEMETVIPVDIMRRAGIKVTVAGLAGKDPVQCSRDV 50  
 |||||:|||||  
 DJ-1 1 MASKRALVILAKGAEEMETVIPVDVMRRAGIKVTVAGLAGKDPVQCSRDV 50  
 Peptide 1

SP22 51 VICPDTSLEEAKTQGPYDVVVLPGGNLGAQNLSSESALVKEILKEQENRKG 100  
 |||||.|||:| |||||:|||||  
 DJ-1 51 VICPDASLEDKKEGPYDVVVLPGGNLGAQNLSESA~~AV~~KEILKEQENRKG 100  
 Peptide 2

SP22 101 LIAAICAGPTALLAHEVGFGCKVTSHPLAKDKMMNGSHYSSESERVEKD 149  
 |||||:| :|||:||||| ||:| |||||  
 DJ-1 101 LIAAICAGPTALLAHEIGCGSKVTTHPLAKDKMMNGGHYTYSENERVEKD 149  
 Peptide 3

SP22 150 GLILTSRGP~~GT~~SFEFALAIVEALSGKDMANQVKAPLVLKD 189  
 |||||:| |||||  
 DJ-1 150 GLILTSRGP~~GT~~SFEFALAIVEALNGKEVAAQVKAPLVLKD 189  
 Peptide 4

093614-00301  
 T06070-4T55/60

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1	A	gctgtgcagagccgctctgtggcaggggttgacctcctaaagggatattccatcttttattaatcattag	65
66	A	tagtgtgggtcagagacttagcaccattgggtctcccccaacctgggtccagacattttcagcagttta	130
131	A	tcggaacagcaacaacagcaacaaaaccttcaaaatttacaagtctttaagaaatagaaATGgca	195
	B	tggcttcgcgtgggtggaggaggcgcggtgcagggtctttaagaaatagaaATGgca	
1			M A 2
196		tccaaaagagctctgggtcatcctagccaaaggagcagaggagatggagacagtgattcctgtgga	260
16		S K R A L V I L A K G A E E M E T V I P V D	24
261		catcatgcggcgagctgggattaaagtcaccgttgagggttggtgggaaggacccccgtgcagt	325
38		I M R R A G I K <u>V T V A G L A G K D P V Q</u>	45
		Peptide 1	
326		gtagccgtgatgtagtgatttgtccggataccagctctggaagaagcaaaaaacacagggaccatac	390
59		<u>C S R</u> D V V I C P D T S L E E A K T Q G P Y	67
391		gatgtggttgttcttccaggaggaaatctgggtgcacagaacttatctgagtcggcttttggtgaa	455
81		D V V V L P G G N L G A Q N L S E S A L V K	89
456		ggagatcctcaaggagcaggagaacaggaagggcctcatagctgccatctgtgcgggtcctacgg	520
103		<u>E I L K</u> E Q E N R K G L I A A I C A G P T	110
		Peptide 2	
			*
521		ccctgctgggtcacgaagtaggctttggatgcaaggttacatcgcaccattggctaaggacaaa	585
124		A L L A H E V G F G C K V <u>T S H P L A K</u> D K	132
		Peptide 3	
586		atgatgaacggcagtcactacagctactcagagagccgtgtggagaaggacggcctcatcctcac	650
146		M M N G S H Y S Y S E S R V E K <u>D G L I L T</u>	154
		Peptide 4	
651		cagccgtgggcctgggaccagcttcgagtttgcgctggccattgtggaggcactcagtggaagg	715
168		<u>S R</u> G P G T S F E F A L A I V E A L S G K	175
716		acatggctaaccaagtgaaggccccgcttgttctcaaagacTAGagagcccaagccctggaccct	780
189		D M A N Q V K A P L V L K D *	189
781		ggacccccaggctgagcaggcattggaagcccactagtgtgtccacagcccagtgaaacctggcat	845
846		tggaagcccactagtgtgtccacagcccagtgaaacctcaggaactaacgtgtgaagtagcccgct	910
911		gctcaggaatctcgccctggctctgtactattctgagccttgctagtagaataaacagttcccca	975
976		aqctc*c*tgacggct*	985

Figure 3

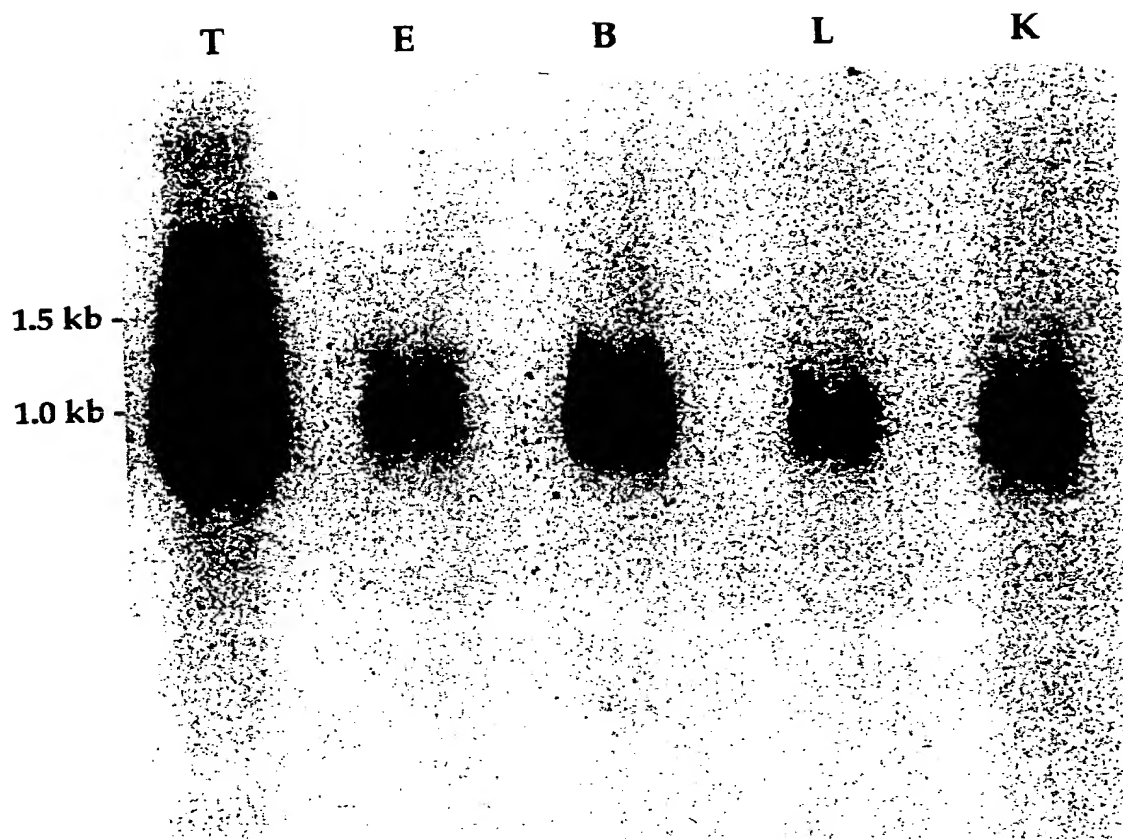


Figure 4

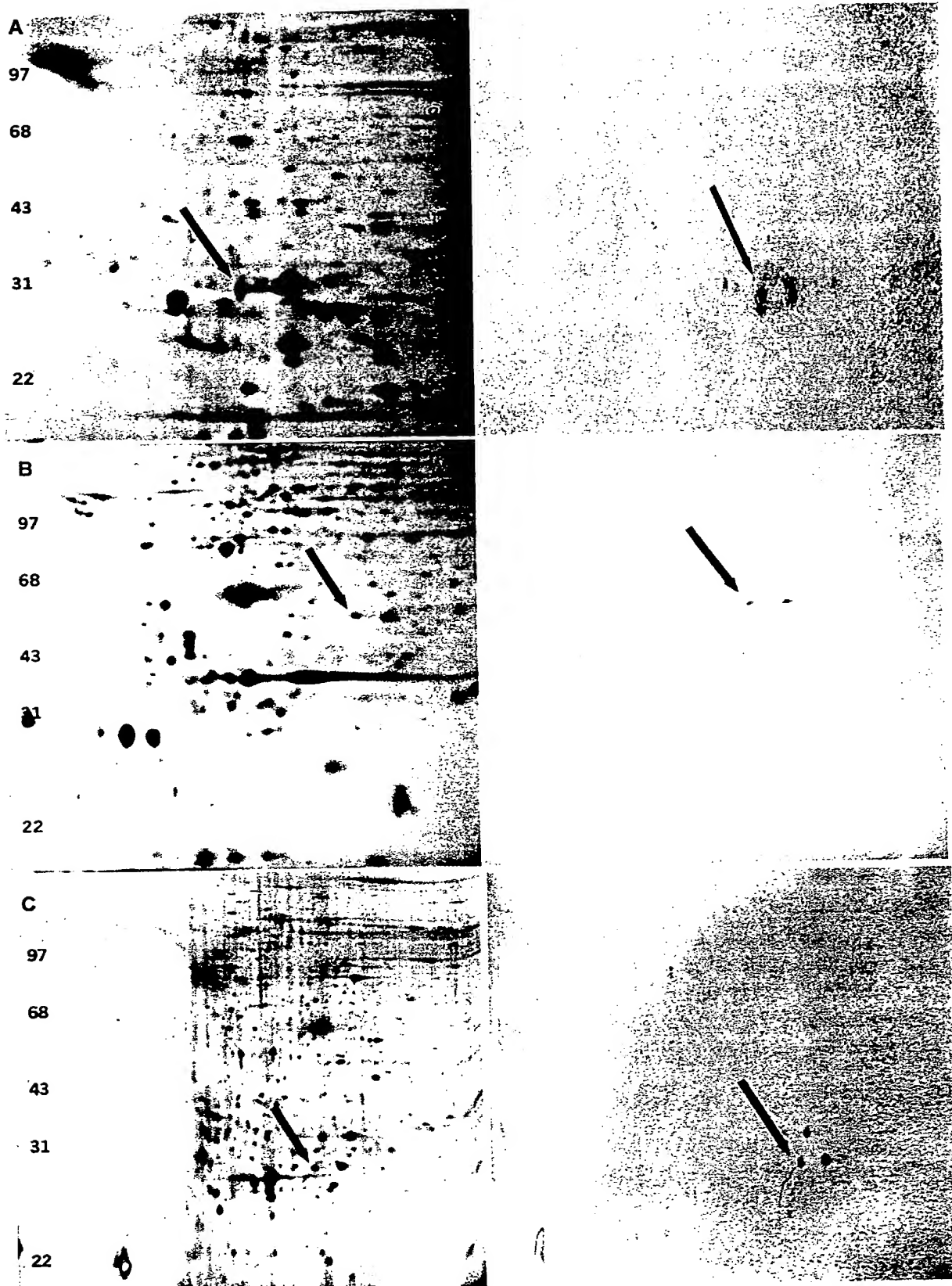


Figure 5

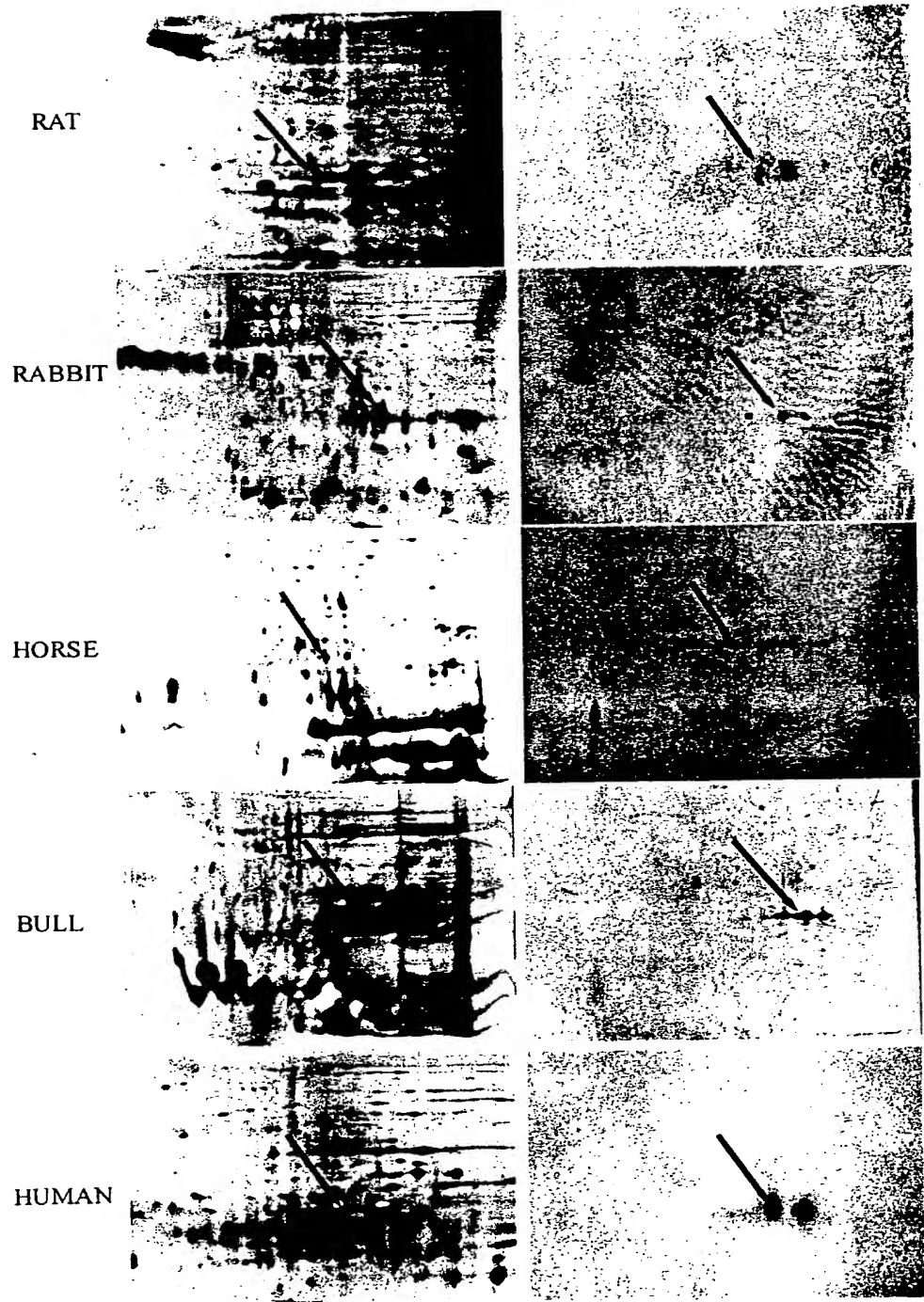


Figure 6

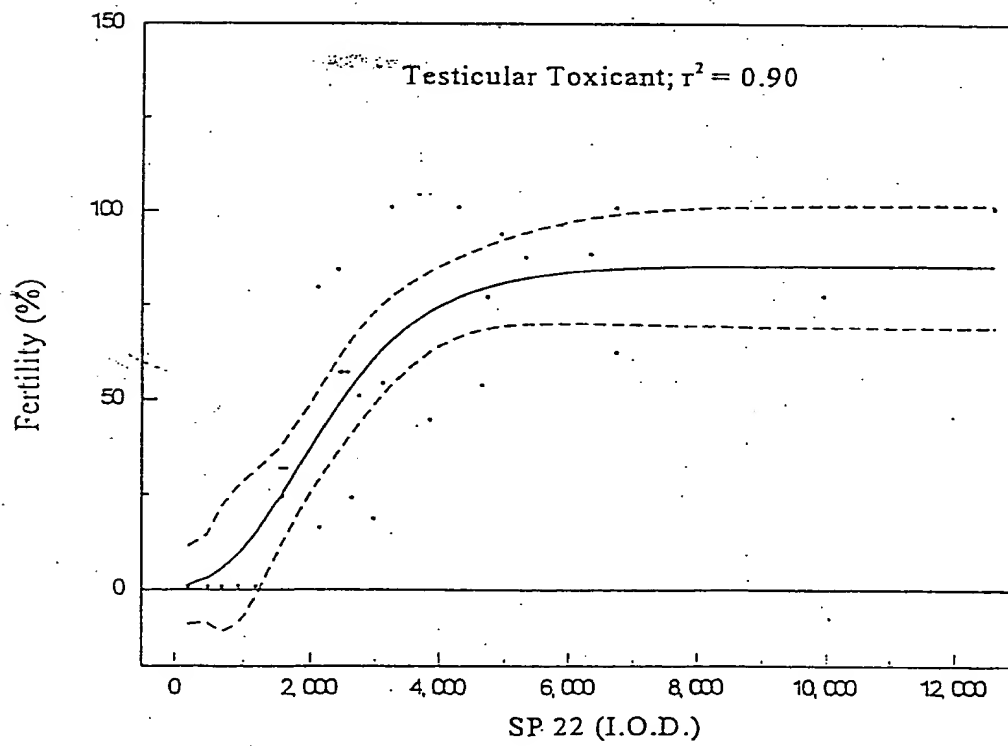
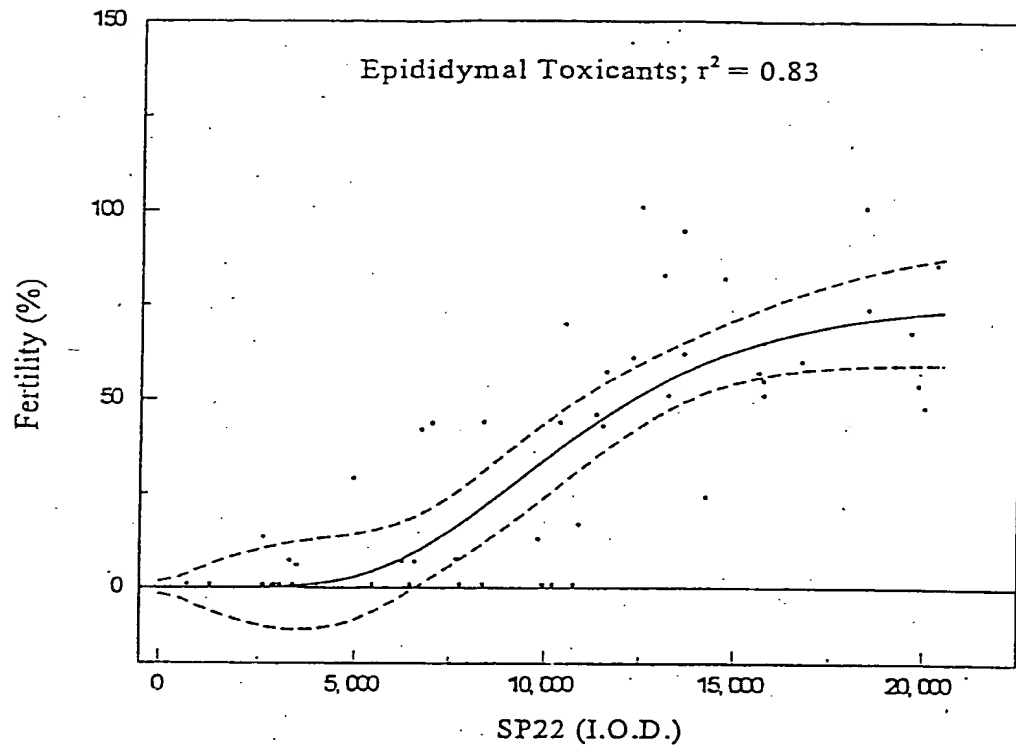
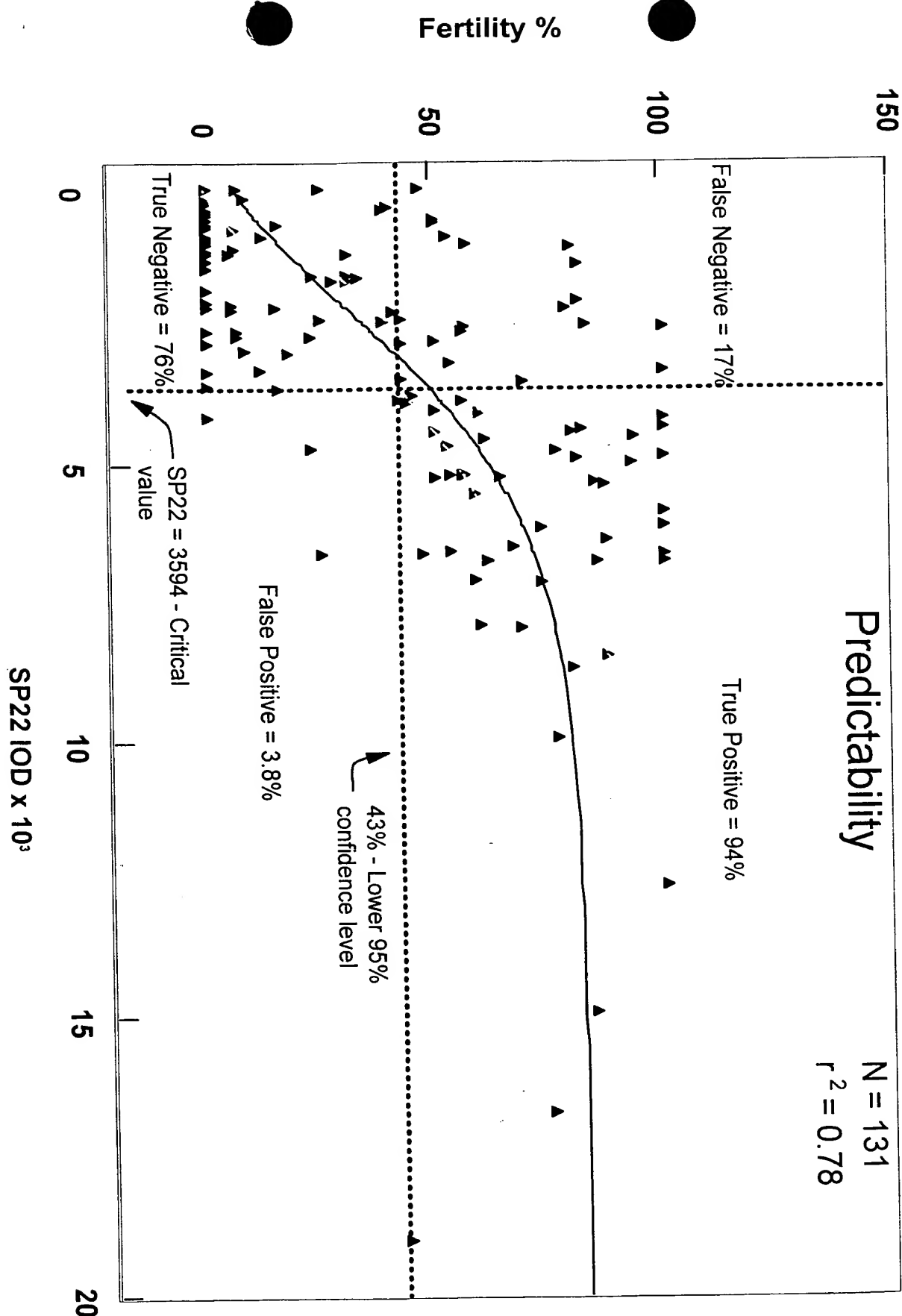


Figure 7



09752544-0103031

Figure 8

OD at 450 nm

0 0.5 1 1.5 2 2.5

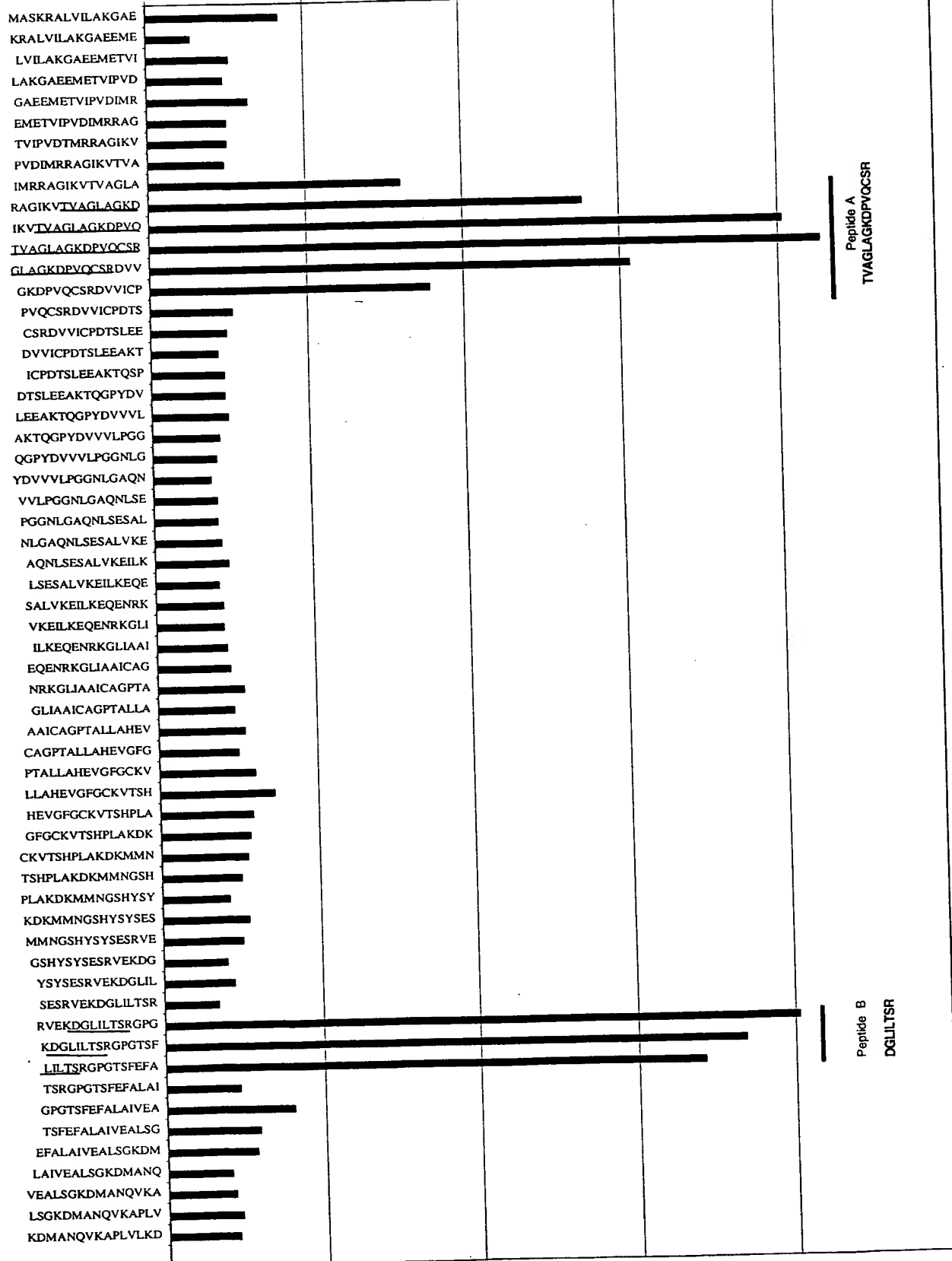
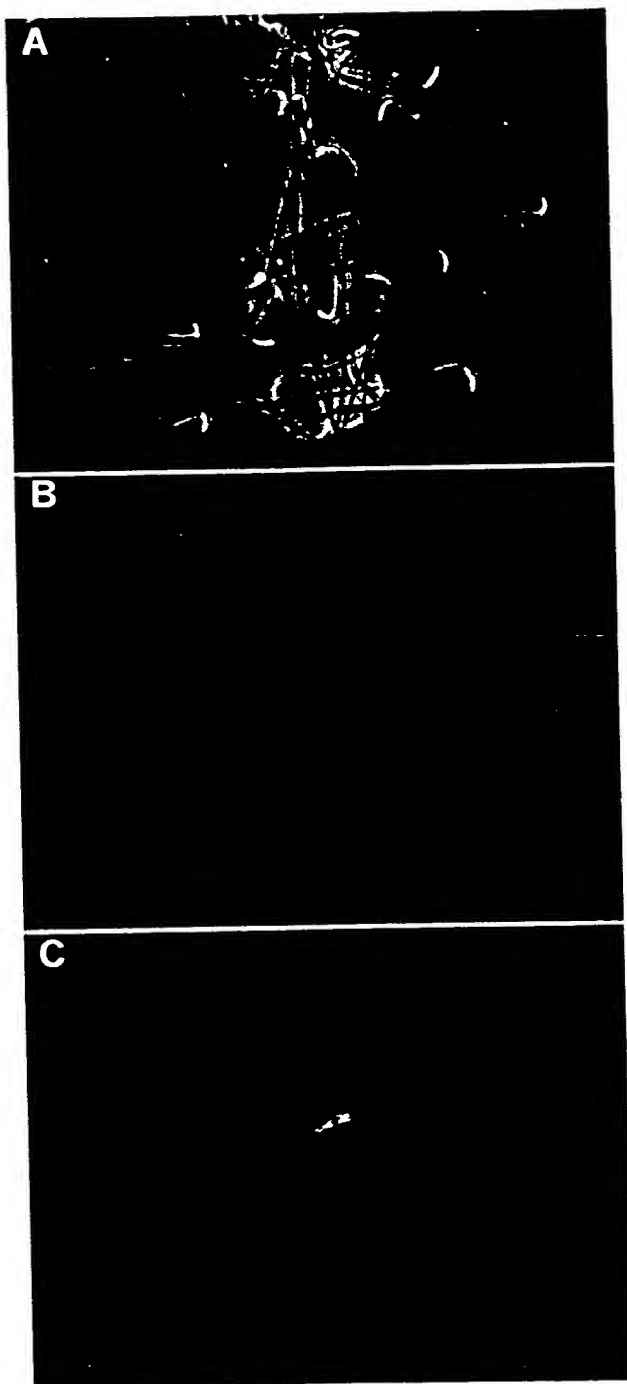




Figure 9



09334-0400  
00000-0000

Figure 10

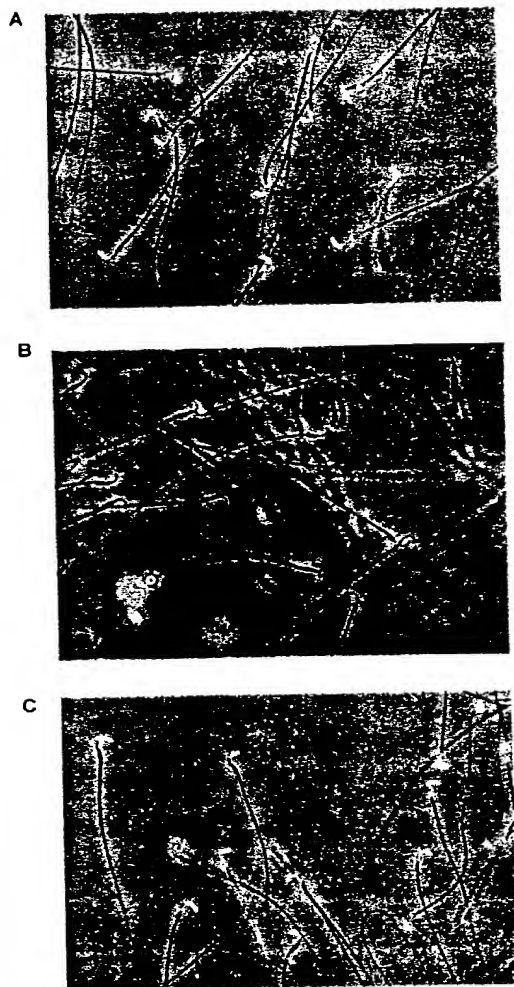


Figure 11

In Utero Insemination

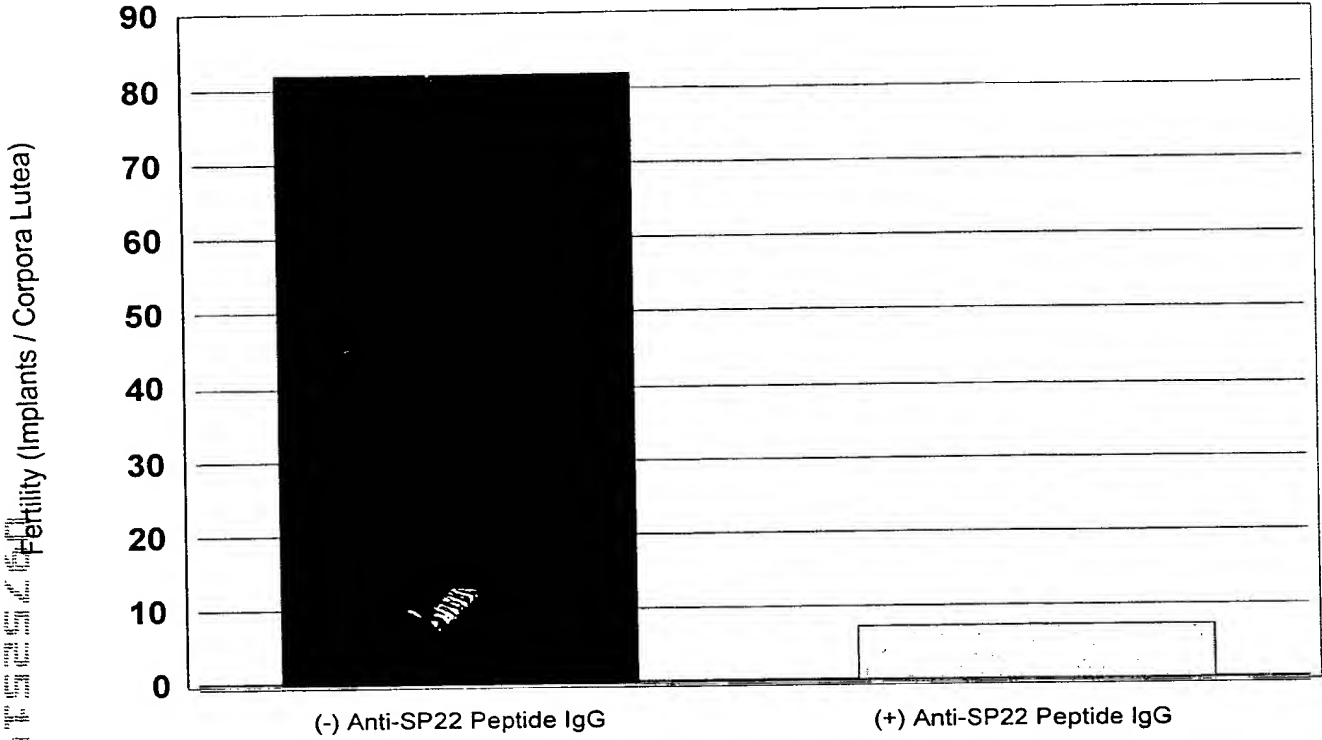


Figure 12

In Utero Insemination

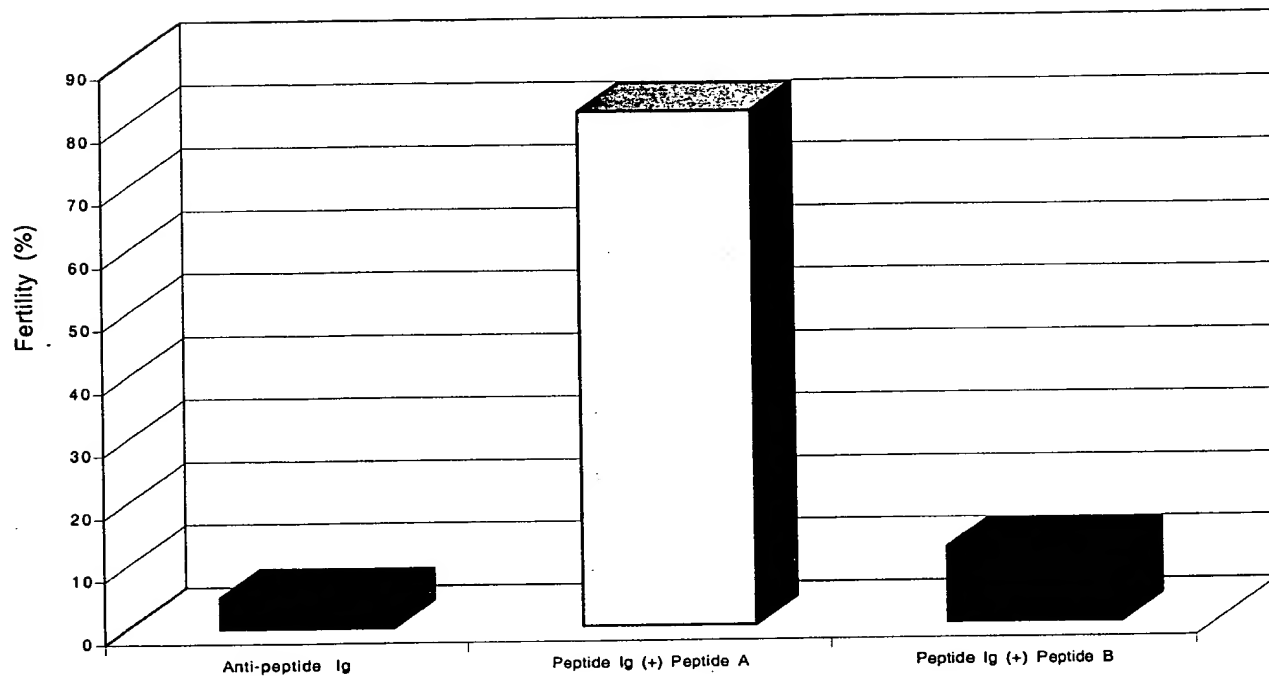


Figure 13

OD at 450 nm

Sequential Sp22 15 MER Peptides

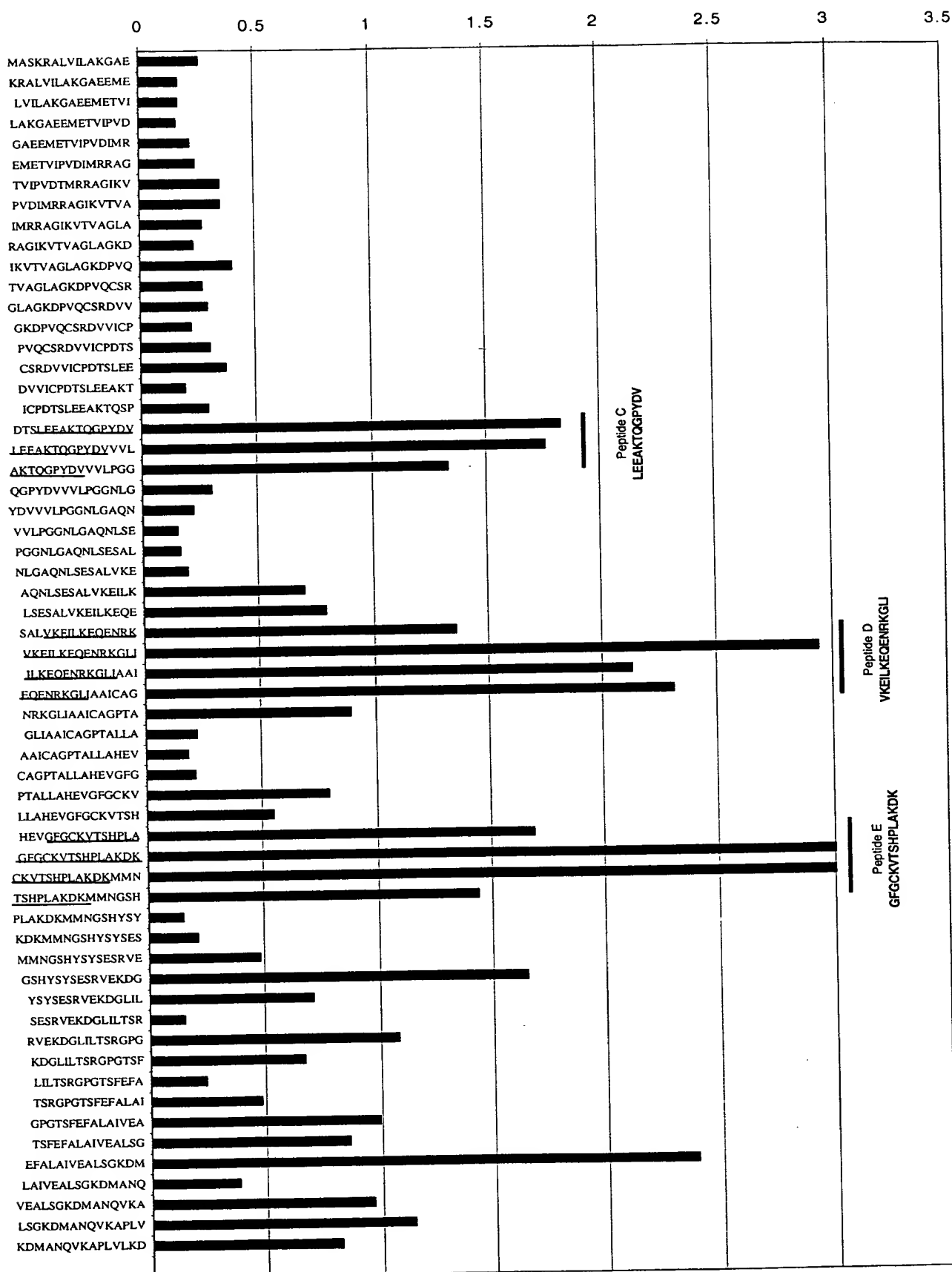
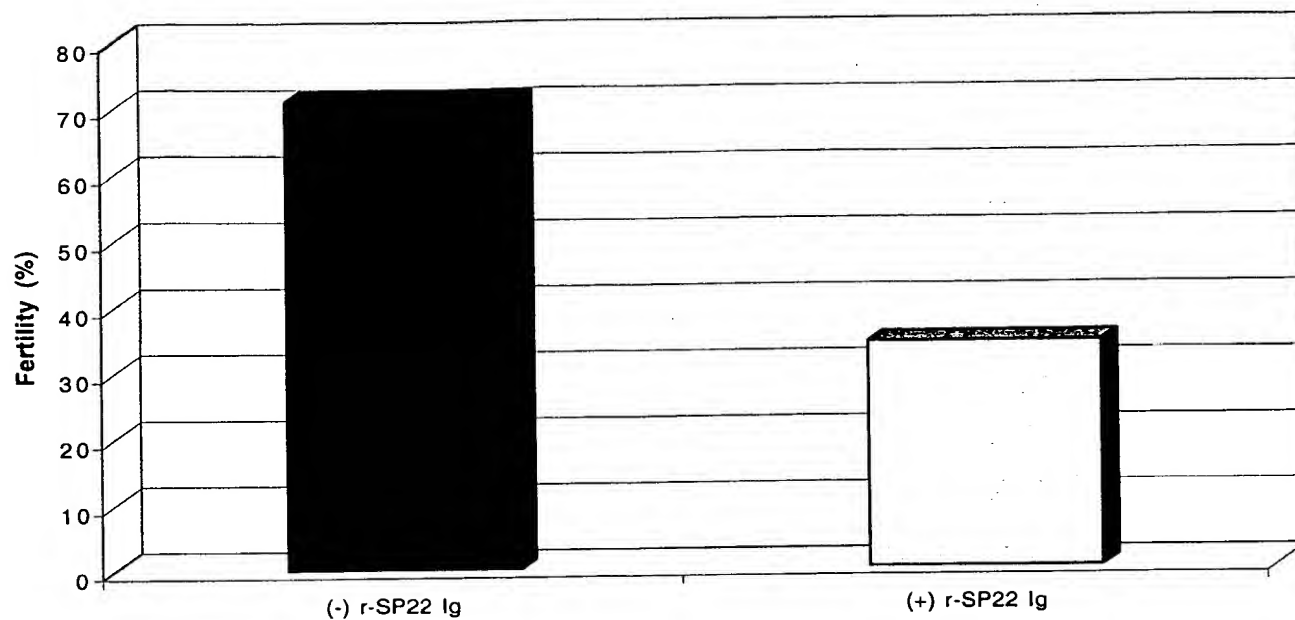
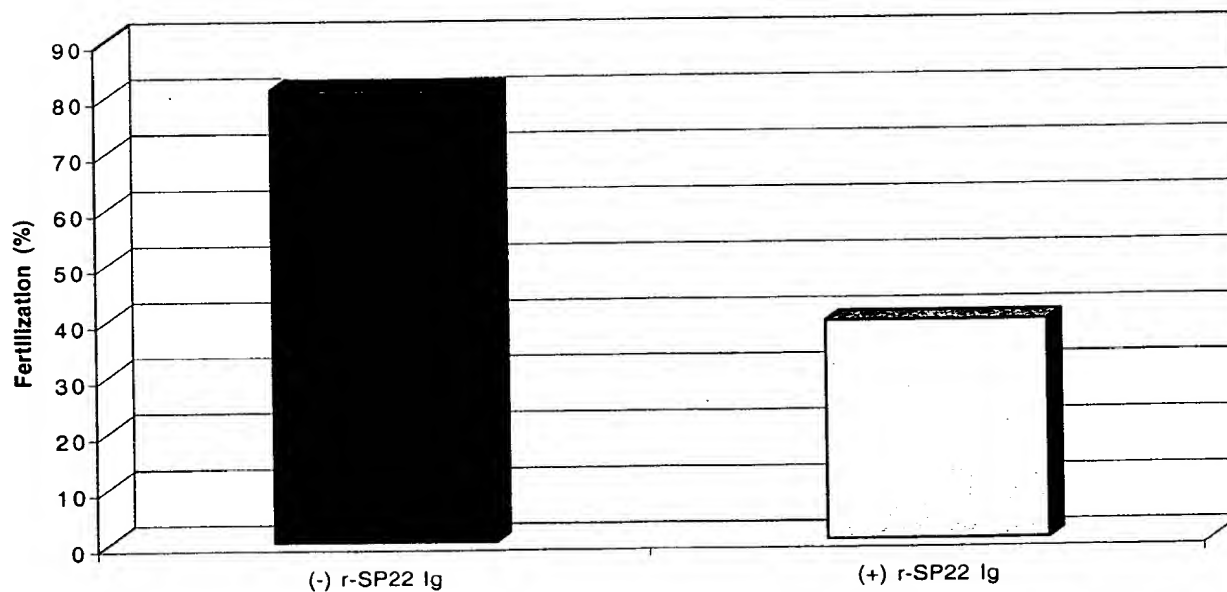


Figure 14

In Utero Insemination



In Vitro Fertilization



[illegible]

1 ~~XX~~atggcatccaaaagagctctgggtcatc 66  
1 X X X X X X X X X X X X X X X M A S K R A L V I 22  
67 ctagccaaaggagcagaggagatggagacagtgattcctgtggacatcatgcggcgagctgggatt 132  
23 L A K G A E E M E T V I P V D I M R R A G I 44  
133 aaagtcaccgttgcaggcttggctgggaaggaccccggtgcagtgtagccgtgatgtagtgtattgt 198  
45 K V T V A G L A G K D P V Q C S R D V V I C 66  
199 ccggataccagctctggaagaagcaaaaacacagggaccatacgtatgtggttgttcttccaggagga 264  
67 P D T S L E E A K T Q G P Y D V V V L P G G 88  
265 aatctgggtgcacagaacttatctgagtcggcttgggtgaaggagatcctcaaggagcaggagaac 330  
89 N L G A Q N L S E S A L V K E I L K E Q E N 110  
331 aggaagggcctcatagctgccatctgtgcgggtcctacggccctgctgggtcacgaagtaggcttt 396  
111 R K G L I A A I C A G P T A L L A H E V G F 132  
397 ggatgcaaggttacatcgcacccattggctaaggacaaaatgatgaacggcagtcactacagctac 462  
133 G C K V T S H P L A K D K M M N G S H Y S Y 154  
463 tcagagagccgtgtggagaaggacggcctcctcctcaccagccgtgggcctgggaccagcttcgag 528  
155 S E S R V E K D G L I L T S R G P G T S F E 176  
528 tttgcgctggccattgtggaggcactcagtggcaaggacatggctaaccaagtgaaggccccgctt 594  
177 F A L A I V E A L S G K D M A N Q V K A P L 198  
595 gttctcaaagactagagagcccaagccctggaccctggacccccaggctgagcaggcattggaagc 660  
199 V L K D \* 202  
661 ccactagagagaccacagcccagtgaaacctggcattggaagcccactagtgtgtccacagcccagt 726  
727 gaacctcaggaactaacgtgtgaagtagcccgctgctcaggaatctcgccctggctctgtactatt 792  
793 ctgagccttgctagtagaataaacagttccccaagctc 830

# FIGURE 16

SP22 (A)

1 getgtgcagagccgtctggcaggggttgacctccTaaagggatattccatcttttattaatcattag 65  
66 tagtctgggtcagagacttagcaccattgggtctccccaacctgggtccagacatttcagcagttta 130  
131 tcggaacagcaacaacagcaacaaaaccttcaaaatttacaagtctttaagaaatagaaATGgca 195  
1 M A 2  
196 tccaaaagagctctggtcactcctagccaaaaggagcagaggagatggagacagtgattcctgtgga 260  
3 S K R A I V I L A K G A E E M E T V I P V D 24  
261 cactatgctggcgagctgggattaaagtcaccgttgccaggttggtctgggaaggaccccggtgcagt 325  
25 I M R R A G I K V T V A G L A G K D P V Q 45  
326 gtagccgtgatgtagtgtattgtccggataccagtcctggaagaagcaaaaaacacagggaccatac 390  
46 C S R D V V I C P D T S L E E A K T Q G P Y 67  
391 gatgtggttgttcttccaggaggaaatctgggtgcacagaacttatctgagtcggctttggtgaa 455  
68 D V V V L P G G N L G A Q N L S E S A L V K 89  
456 ggagatcctcaaggagcaggagaacaggaagggtcctcatagctgccatctgtgctgggtcctacgg 520  
90 E I L K E Q E N R K G L I A A I C A G P T 110  
521 ccctgctgggtcacgaagtaggctttggatgcaagggttacatcgcacccattggctaaggacaaa 585  
111 A L L A F E V G F G C K V T S H P L A K D K 132  
586 atgatgaacggcagtcactacagctactcagagagccgtgtggagaaggacggcctcctcctcac 650  
133 M M N G S H Y S Y S E S R V E K D G L I L T 154  
651 cagccgtgggcccgggaccagcttcgagtttgctggccattgtggaggcactcagtggaagg 715  
155 S R G P G T S F E F A L A I V E A L S G K 175  
716 acatggctaaccagtggaaggccccgcttgttctcaaagacTAGagagcccaagccctggaccct 780  
176 D M A N Q V K A P L V L K D 189  
781 ggacccccaggctgagcaggcattggaagcccactagtgtgtccacagcccagtgaaacctggcat 845  
846 tggaagcccactagtgtgtccacagcccagtgaaacctcaggaactaacgtgtgaagtagcccgct 910  
911 gctcaggaatctcgccctggctctgtactattctgagccttgctagtagaataaacagttcccca 975

FIGURE 16